

line 31, delete "wanted" and replace with  
-- desired --.

Page 2, line 14, after "DNA", delete ", an" and replace with  
-- . An --;

between lines 20 and 21, insert -- Summary of the  
Invention --;

line 21, delete "therefor" and replace with  
-- , therefore, --

between lines 30 and 31, insert --

#### Brief Description of the Drawings

Figure 1 is an outline of protocol R. Recovery of ds-NA takes place from the initial pellet (R-pellet), recovery of ss-NA takes place from initial supernatant (R-sup). L11, L10, L6 and L2 are GuSCN-based buffers, SC is silica particle suspension.

Figure 2 shows the separation of ds-DNA and ss-DNA. NA was purified (in duplicate) by protocol R from a mixture of ds-DNA (phage lambda, HindIII digest, 1 $\mu$ g) and ss-DNA (phage M13 DNA, 500ng). Final elutions were in 50 $\mu$ l TE and 25 $\mu$ l were electrophoresed through a 1% agarose gel (containing ethidium bromide), which was subsequently photographed under UV-illumination. Lane 1, 100% recovery marker for ds-DNA fragments; lane 2, 100% recovery marker ss-DNA; lane 3, 100% recovery marker mixture ds-DNA/ss-DNA. Lanes 4 and 5, output protocol R-pellet; lanes 6 and 7, output protocol R-sup.

Figure 3 shows the separation of ds-RNA and ss-RNA. NA was purified (in duplicate) by protocol R from a mixture of ds-RNA (Rotavirus ds-RNA) and ss-RNA (phage MS2 RNA, 800ng). Final elutions were in 50 $\mu$ l TE and 25 $\mu$ l were electrophoresed through a 1% agarose gel (containing ethidium bromide) which was subsequently photographed under UV-illumination. Lane 1, 100% recovery marker for ds-RNA fragments; lane 2, 100% recovery

marker ss-RNA; lane 3, 100% recovery marker ds-RNA/ss-RNA mixture. Lanes 4 and 5, output protocol R-pellet; lanes 6 and 7, output protocol R-sup.

Figure 4 shows the separation of ds-DNA and ss-RNA. NA was purified (in duplicate) by protocol R from a mixture of ds-DNA (750ng phage lambda digested with hindIII) and ss-RNA (phage MS2 RNA, 800ng). Final elutions were in 50 $\mu$ l TE and 25 $\mu$ l were electrophoresed through a 1% agarose gel (containing ethidium bromide) which was subsequently photographed under UV-illumination. Lane 1, 100% recovery marker for ds-DNA; lane 2, 100% recovery marker for ss-RNA; lane 3, 100% recovery marker for ds-DNA/ss-RNA mixture. Lanes 4 and 5, output protocol R-pellet; lanes 6 and 7, output protocol R-sup.

Figures 5A and 5B show the separation of ds-DNA and ss-RNA. NA was purified by protocol R-sup from a mixture of ds-DNA (1000ng linearized pHC624, 2kb) and ss-RNA (phage MS2 RNA, 800ng). Final elution was in 50 $\mu$ l TE and 25 $\mu$ l or tenfold serial dilutions of the ss-NA fraction were electrophoresed through a 1% agarose gel (containing ethidium bromide) which was subsequently photographed under UV-illumination. Figure 5A: upper row, lane 1, HindIII digested phage lambda DNA; lane 2, 100% recovery marker for ds-DNA and ss-RNA and serial tenfold dilutions thereof (lanes 3 - 6). Bottom row, output of protocol R-sup (lane 2) and tenfold serial dilutions (lanes 3 - 6). Figure 5B: ds-DNA was subsequently transferred to a nitrocellulose filter and hybridized with a <sup>32</sup>P-labelled probe homologous to input ds-DNA. ds-DNA and ss-RNA are indicated.

Figure 6 shows the separation of genomic DNA from ss-RNA and how to deal with trapping of ss-RNA. *E. coli* were directly used as input material for duplicate extractions by protocol R (lanes 6 and 7, R-pellet: lanes 8 and 9). Alternatively, total NA was first purified by protocol Y using diatoms as NA-carrier (which

causes shearing of genomic DNA). The purified nucleic acids were subsequently used as input for protocol R (lanes 2 and 3, R-pellet; lanes 4 and 5, R-sup). Final elutions were in 50 $\mu$ l TE and 25  $\mu$ l were electrophoresed through a 1% agarose gel (containing ethidium bromide) which was subsequently photographed under UV-illumination. Marker lanes 1 and 10 (500ng phage lambda DNA, HindIII digested). 23S and 16S rRNA, and ds-DNA molecular weight markers (23kb and 2.0kb) are indicated.

Figure 7 is an outline of the procedure.

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*A3*

Figures 8A and 8B show how single-stranded nucleic acid was purified from samples containing HIV-1 RNA and TE (negative control) by protocol R-sup. and subsequently amplified with the non-selective RT-PCR. Panel A: lane 1, 100 bp DNA ladder; lanes 2 and 3 negative extraction controls; lanes 4 and 5 non-selectively amplified HIV-1 RNA; lanes 6, 7, 8 and 9 600, 60, 6 and 0 molecules resp. of pHCreC (positive PCR control). Panel B: Southern blot hybridization with <sup>32</sup>P-labelled HIV-1 probes (containing the GAG, POL and ENV genes of HIV-1) of the samples shown in panel A. After overnight hybridization at 65°C in 6 x SSC, 0.1% SDS, 10% Dextran Sulphate and 50 $\mu$ g/ml salmon sperm DNA, the filter was subsequently washed under high stringency conditions with 0.1 SSC/0.1% SDS at 65°C, and autoradiographed on X-ray film for two hrs. at -70°C. This experiment showed that most of the bands visible on the ethidium bromide stained agarose gel originated from the HIV-1 genome.

Detailed Description of the Invention --; and

line 37, delete "that EDTA is applied" and replace with -- of EDTA --.

Page 3, line 12, delete "basepairs" and replace with -- base pairs --;

line 15, delete "a.o." and replace with -- , among others, --; and

line 22, delete "effect" and replace with -- affect --.

Page 4, line 28, delete "when" and replace with -- that at which --.

Page 6, line 7, delete "ethidiumbromide" and replace with -- ethidium bromide --; and

line 10, after "strands,", insert -- and --.

Page 7, line 10, delete "Guanidiumthiocyanate" and replace with -- Guanidinium thiocyanate --.

Page 8, line 18, delete "silica-pellet" and replace with -- silica pellet --.

Page 9, line 3, delete "ethidiumbromide" and replace with -- ethidium bromide --;

line 17, delete "lysisbuffers" and replace with -- lysis buffers --; and

line 36, delete "silica-" and replace with -- silica --.

Page 10, line 35, after "Again", delete "are" and after "fractions", insert -- are --.

Page 11, line 3, delete "ethidiumbromide" and replace with -- ethidium bromide --; and

line 11, delete "0,1%" and replace with -- 0.1% --.

Page 15, line 5, delete "microliter" and replace with -- microliters --; and